

Initiative Addressing At Risk for Overweight and Overweight Children:

Pilot Study of a Model School based Approach

*This initiative was funded by a grant to
The Mississippi Food Network by Kellogg Foundation.*

A collaboration linking the following entities:

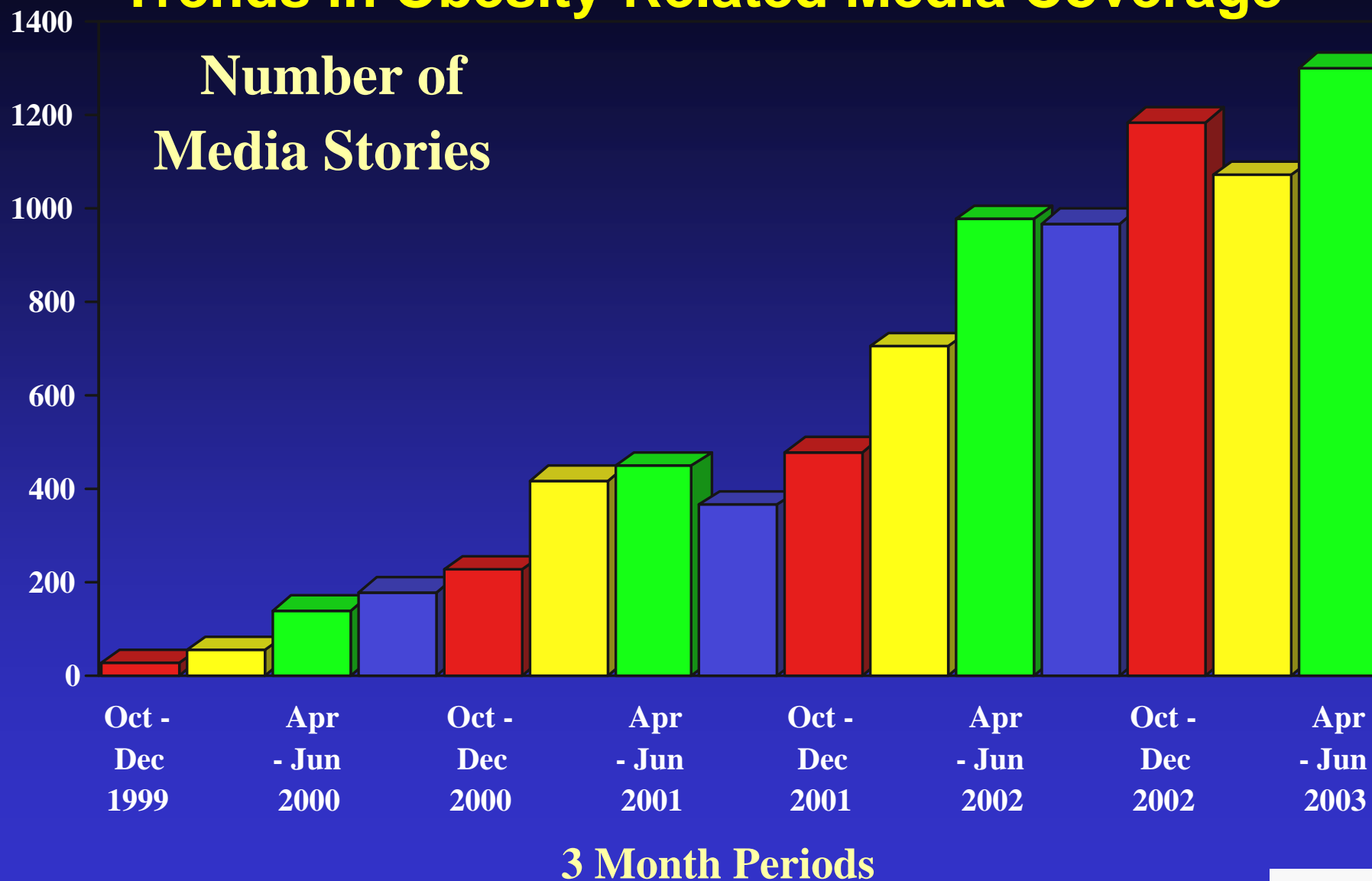
Mississippi Alliance for Self-Sufficiency
Mississippi State University - Food Stamp Nutrition Education Program
MS, LA, AR Departments of Education
International Life Sciences Institute - Center for Health Promotion
Wellness Incorporated

Childhood Trends

- 1 in 10 of 2-5 year olds are overweight or at risk for being overweight.
- 1 in 6.5 of 6-11 year olds are overweight or at risk for being overweight.
- Since 1980, the % of overweight children in the U.S. has nearly doubled.

Ogden, et al. (2002) JAMA

Trends in Obesity-Related Media Coverage



Note: Figures represent IFIC tracking of U.S. and International (English-speaking) wire reports and print articles on the issue and do not necessarily reflect the true number of stories.

A look at Mississippi (MS)

- Now among the highest for overweight – (CDC, 2003)
- 34.6% of young adults (ages 18-34) are overweight compared to 31.1% nationwide
- 3 out of 5 students (9-13 years old) reported they do not participate in organized physical activities outside of school (CDC, 2003)

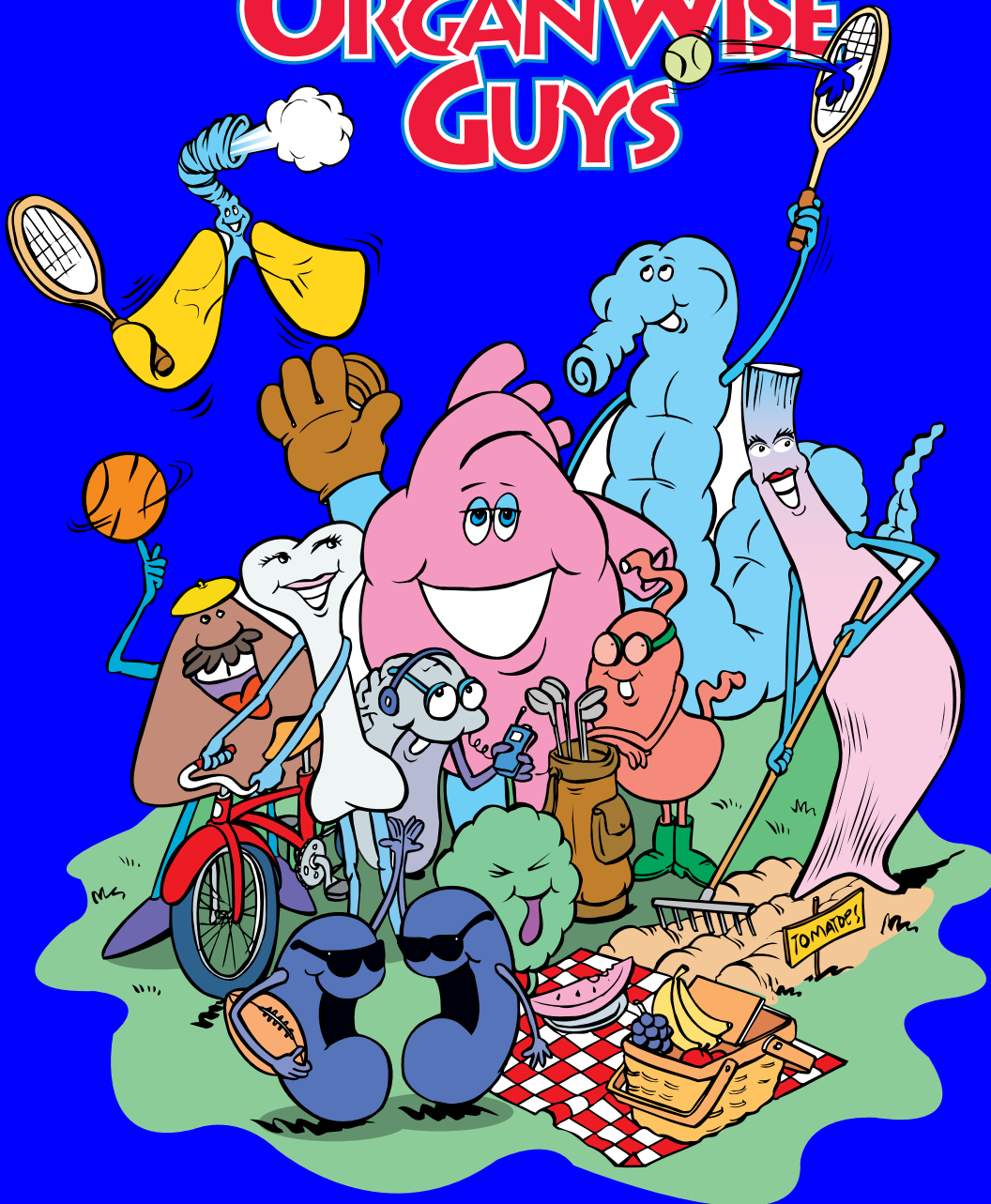
The Delta Pilot Project Objectives

- Primary:
 - Determine the feasibility of the intervention in low-income schools.
 - Determine what we can expect to find as far as implementation patterns .
- Secondary:
 - Establish a successful program model that could be easily duplicated in other low-income schools.

The Delta Pilot Project

- 13 week pilot intervention
- 4 elementary schools in the Mississippi Delta Region
- 14 classrooms
- 263 students

THE ORGANWISE GUYS



Meet the "guys" . . .

- Hardy Heart
- Calci M. Bone
- Madame Muscle
- Sir Rebrum
- Windy the lungs
- Luigi Liver
- The Kidney Brothers
- Peter Pancreas
- Pepto the stomach
- Peri Stolic

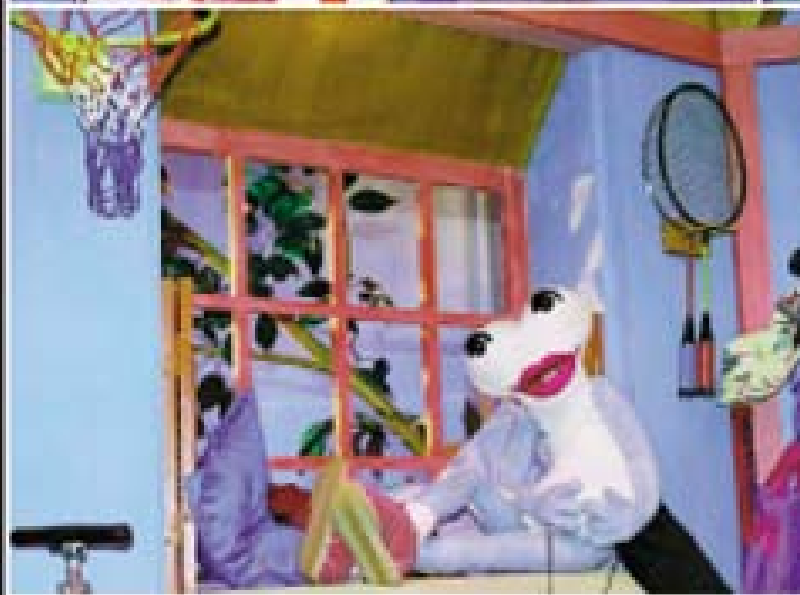
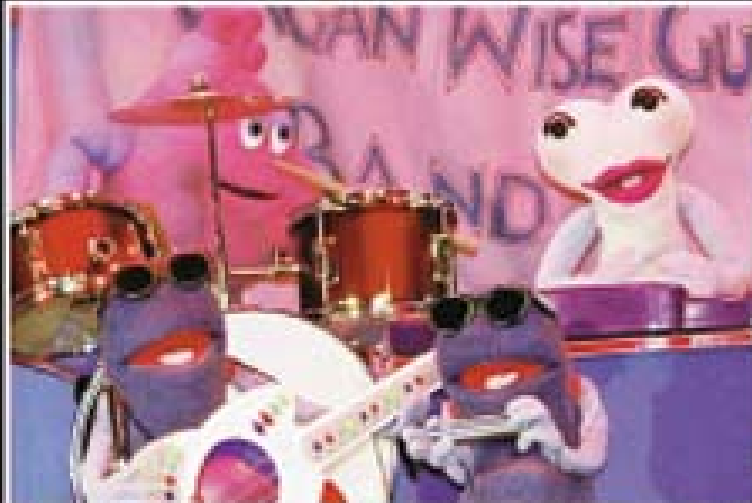
New OrganWise Recruits



Materials include OrganWise Guys books, activities and educational tools teaching healthy lifestyle behaviors and are all linked to core curriculum objectives.

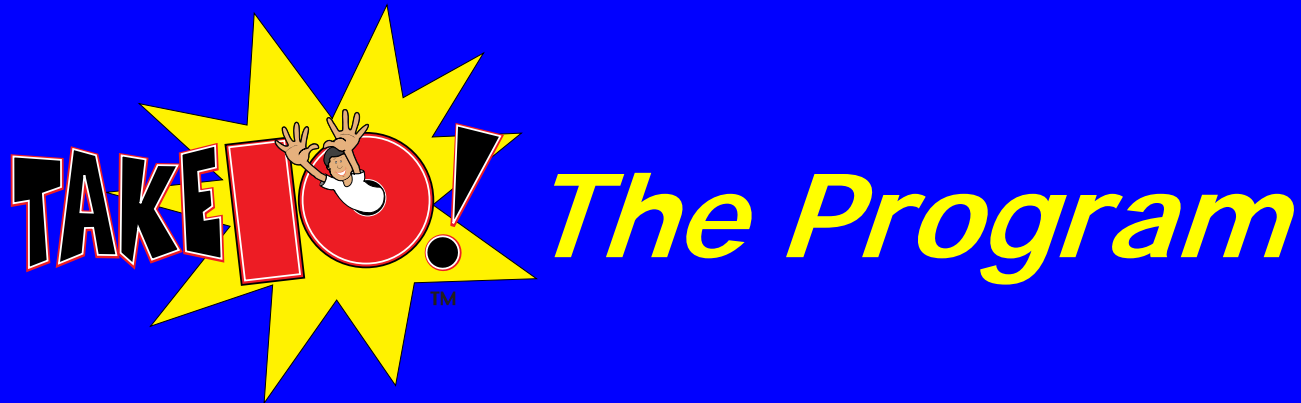


And finally, the “guys” have come to life!





Academics
+
Physical Activity



A classroom-based physical activity promotion program designed to reduce sedentary behavior while maintaining a focus on academics.



The Materials

- Physical activity cards are linked to core academic objectives
- Teacher manual coordinates the lessons
- TAKE 10! Tracking Poster motivates kids
- Teacher Training Video explains the program

The Delta Intervention:

THE ORGANWISE GUYS®



INVISIBLE JUMP ROPE

WARM-UPS:
2,4,6,8,10,12,14,16,18,20 . . . 100
1,3,5,7,9,11,13,15,17,19 . . . 99

COUNTING BACKWARDS:
By 2's starting at 100
COUNTING BY 5'S:
Five, ten, fifteen, twenty.
Count by 5's to 100.

COUNTING BY 3'S:
Three, Six, Nine
staying healthy is really fine!
While you jump count by three
See if you can reach 90.
Ready, go!

YOU DO THE MATH:

2x2=4	3x3=9	4x4=16	5x5=25	7x7=49
2x3=6	3x4=12	4x5=20	5x6=30	7x8=56
2x4=8	3x5=15	4x6=24	5x7=35	7x9=63
2x5=10	3x6=18	4x7=28	5x8=40	7x10=70
2x6=12	3x7=21	4x8=32	5x9=45	8x8=64
2x7=14	3x8=24	4x9=36	5x10=50	8x9=72
2x8=16	3x9=27	4x10=40	6x6=36	8x10=80
2x9=18	3x10=30	6x7=42	6x8=48	9x9=81
2x10=20		6x9=54	6x10=60	9x10=90
				10x10=100

SWITCH AND DO DIVISION

TAKE 10 TEN SHOW ME THE MONEY!

Name: _____

The OrganWise Guys® have spring fever and are planning a trip to the park. They purchased some things they thought they might want to take with them. As you can see, they made some great purchases. Draw the coins and/or bills (similar to those pictured below) that each OrganWise Guy might receive as change for each purchase.

25c 10c 5c
1c \$1.00 \$5.00

Starting cash	Purchased . . .	The change they received:
Hardy \$10.00	. . . a baseball for \$4.70	
Madame Muscle \$10.00	. . . gardening tools for \$7.25	
Luigi Liver \$15.00	. . . a basketball for \$11.90	
Peter Pancreas \$10.00	. . . a variety of fruit for \$6.55	
Calci M. Bone \$20.00	. . . a bike helmet for \$18.97	
Windy \$ 5.00	. . . tennis balls for \$2.97	
Kidney Brothers \$20.00	. . . a football for \$13.86	
Pegto \$25.00	. . . a putter for \$23.50	
Peri Stolic \$ 5.00	. . . a sun visor for \$1.99	
Sir Rebrum \$10.00	. . . batteries for \$2.41	

Making Change (20A Mathematics - 14)

The Delta Intervention (cont.)

Teachers agreed to:

- Read to their students from The OrganWise Guys books weekly
- Conduct 3 TAKE 10! Sessions per week with their student
- Show the two videos developed during this project (twice)
- Record on a monthly calendar each time they used the materials

Pilot Results

- Teacher Implementation Survey
- Teacher tracking calendar
- Pre/Post Student knowledge assessments
 - Nutrition
 - Physical Activity

Teacher Implementation

100% response rate

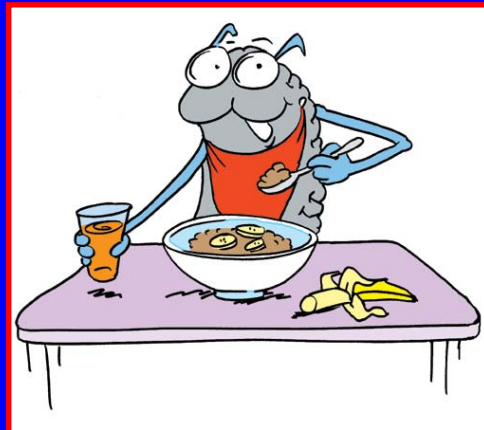
- Teachers implemented TAKE 10! activities 2.93 times per week
- 100% of teachers:
 - indicated that they would continue to implement TAKE 10! in their classroom next school semester
 - indicated they believe TAKE 10! reinforced academic concepts
 - indicated that the school assembly program helped bring to life the health concepts taught in the TAKE 10! materials
 - indicated they would recommend the school assembly program
- 93% of teachers:
 - indicated that their students enjoyed TAKE 10! activities.
- 80% of teachers:
 - indicated that their students requested TAKE 10! when they had not been done that day

Student Knowledge Assessment

Nutrition

Increase pre/post in the number of students who knew . . .

. . . milk is a healthy drink for breakfast	8%
. . . calcium is a mineral	11%
. . . oranges are a good choice as a healthy snack	26%
. . . eating breakfast every day is a good health habit	39%
. . . eggs are not part of the milk group	41%



Student Knowledge Assessment

Physical Activity

Increase pre/post in the number of students who knew . . .

. . . that being active was a better health habit than watching TV	31%
. . . that exercising was good for your heart	24%
. . . that being active is a good health habit.	25%
. . . that stretching was a good way to cool down	37%
. . . riding in a car is not a heart healthy activity	44%



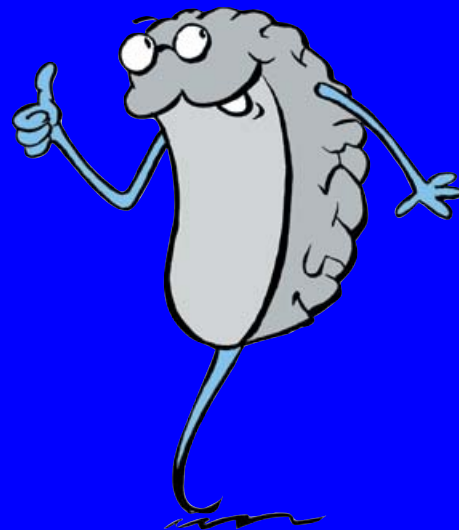
Teacher Comments

“This is a great program, It helps students learn in a fun way!”

“The students were more focused on eating fruits and vegetables during lunch after watching the videos.”

“It’s a fun and exciting way to learn about being healthy.”

“The students always wanted to do a TAKE 10!”



EVALUATION TEAM

Dr. Paula Threadgill, Mississippi State University

Extension Service

Dr. Deborah Little, Mississippi State University

Extension Service

Shannon Williams, International Life Sciences

Institute Center for Health Promotion

Sustainability

USDA's matching fund opportunities

Does not take away from academic learning time

Can be implemented to meet state health curriculum objectives

Minimal teacher (planning time) investment

Statewide partnerships and collaboration is key

Delta H.O.P.E.

(**H**ealthy **O**ptions for **P**eople through **E**xtension)

- A 4-year initiative to expand and evaluate the project (85 schools in MS, LA, AR Delta areas)
- Partnerships include
 - MSU Extension Service
 - UA Extension Service
 - LSU Ag Center, Research and Extension
- Project activities
 - Local School Involvement
 - Mass Media Opportunities
 - Information for the caregiver and the child

Delta H.O.P.E.

(Healthy Options for People through Extension)

Over the next four years - in the Mississippi, Louisiana and Arkansas Delta Regions.

- Will be in 85 schools
 - 2,025 classrooms
- Major outcomes
 - Health status (BMI)
 - School Health Index
 - Student knowledge assessments
 - Teacher implementation
 - Physical activity behavior

Thanks to:

The Kellogg Foundation

Mississippi State University
Extension Service

Mississippi Department of Education

Mississippi Alliance for Self-Sufficiency

ILSI Center for Health Promotion

Wellness Incorporated

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